

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
25 August 2005 (25.08.2005)

PCT

(10) International Publication Number  
WO 2005/078344 A1

(51) International Patent Classification<sup>7</sup>: F23D 14/62,  
14/14, F22B 5/00

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(21) International Application Number:  
PCT/US2005/003758

(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.

(22) International Filing Date: 4 February 2005 (04.02.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/542,150 5 February 2004 (05.02.2004) US

(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,  
SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,  
GQ, GW, ML, MR, NE, SN, TD, TG).

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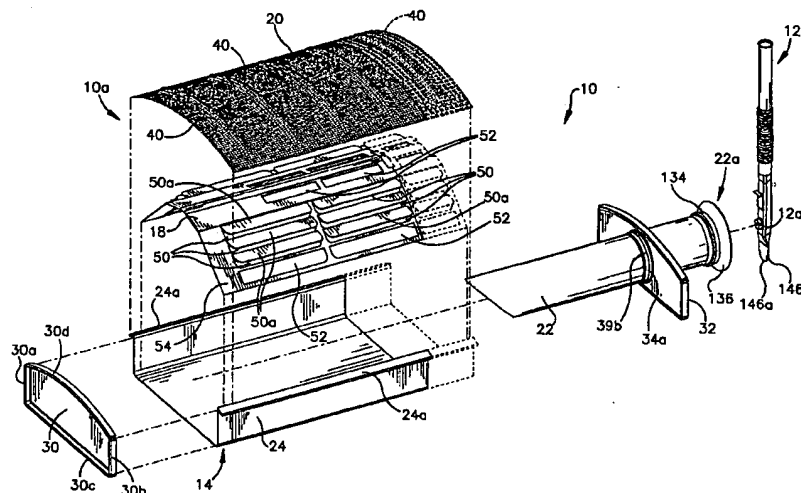
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Published:  
— with international search report

[Continued on next page]

(54) Title: BURNER



(57) Abstract: A gas burner including a burner body having a lower housing, an inlet conduit and a combustion surface element attached to the lower housing. A diffuser/reflector positioned within the body encourages even distribution and mixing of a combustible gas/air mixture. The diffuser/reflector is preferably of a sheet metal construction and includes a plurality of stamped openings with each of these openings having an overhanging guide plate. The combustion surface element includes a plurality of integrally formed rigidizing ribs and is made from a high temperature steel alloy wire cloth. The inlet conduit is secured directly or indirectly to an access door/bulkhead that is used to close off an access opening formed in a water heater wall through which the burner is installed. In one construction, an air scoop shrouds the inlet conduit and at least partially defines a flow path of primary air, substantially isolated from the combustion chamber.

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— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

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